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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,017	06/21/2001	Craig Lyle Stevens		7519

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EXAMINER
MOORE, KARLA A

ART UNIT	PAPER NUMBER
1763	

DATE MAILED: 12/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/888,017	STEVENS, CRAIG LYLE	
	Examiner	Art Unit	
	Karla Moore	1763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *9-12* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 13-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-20* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I. Claims 1-8 and 13-20, drawn to a wafer processing system, classified in class 118, subclass 719.

   II. Claims 9-12, drawn to a method for handling a wafer in a wafer processing system, classified in class 438.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the method as claimed could be practiced by another materially different apparatus, for instance, an apparatus with a single load lock.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Mr. Patrick Benedicto on 11/19/02 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-8 and 13-20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-12 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

   A person shall be entitled to a patent unless –

   (e) the invention was described in-

> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

6. Claims 1-5, 7, 13-15 and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Publication No. US 2002/0033136 A1 to Savage et al.

7. Savage et al. disclose a wafer processing system in Figure 2, comprising: a loading station (6,7); a process module (40) maintained at a predetermined pressure during normal operation (page 3, paragraph 39); and a first single-wafer load lock (80) directly adjacent to the process module, the first single-wafer load lock being coupled to receive a wafer originating in the loading station (page 3, paragraph 47).

8. With respect to claim 2, the system further includes a second single-wafer load lock (see Figure 2) directly adjacent to said process module, the second single-wafer load lock having a single wafer support (Figures 7 and 8, 95; page 5, paragraphs 60-61).

9. With respect to claim 3, the process module includes a plurality of processing stations (page 3, paragraph 47).

10. With respect to claim 4, the loading station includes a front-opening unified pod (Figure 2, 7; page 3, paragraph 48).

11. With respect to claim 5, the system further comprises a robot (Figure 2, 8; page 3, paragraph 48) between the loading station and the first single-wafer load lock.

12. With respect to claim 7, the single wafer support of the first-single wafer load lock includes a pedestal having an integral cooling unit (page 5, paragraphs 60-64).

13. With respect to claim 20, at least one of the plurality of processing stations of is capable of heating a supported wafer (page 6, paragraph 67).

14. With respect to claim 13-15 and 17-19, the limitations recited are combinations of what is described above and are also disclosed by Savage et al.

Claim Rejections - 35 USC § 103

15. Claims 6, 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Savage et al. as applied to claims 1-5, 7, 13-15 and 17-20 above, and further in view of U.S. Patent No. 5,314,541 to Saito et al.

16. With respect to claim 6, Savage et al. disclose the invention substantially as claimed and as described above, including evacuating each of the single-wafer load locks to a vacuum state.

17. However, fail to specifically disclose a pump coupled only to the first and second single-wafer load locks, the pump being located locally on the wafer processing system.

18. Saito et al. teach the use of vacuum pumps (Figure 20, 620; column 17, rows 35-68) coupled only to first and second single-wafer load locks (612, 614), the pump being located locally on the wafer processing system, for the purpose of evacuating each of the load locks to a vacuum atmosphere prior to loading a wafer into process chamber (610).

19. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided a pump coupled only to the first and second single-wafer load locks in Savage et al. in order to evacuate each of the load locks to a vacuum atmosphere prior to loading a wafer into a process chamber as taught by Saito et al.

20. With respect to claims 8 and 16, Savage et al. disclose the invention substantially as claimed and as described above.

21. However, Savage et al. fail to teach a single wafer support of the first single-wafer load lock including a single pedestal having an integral heating unit.

22. Saito et al. teach the single wafer support of the first single-wafer load lock including a single pedestal having an integral heating unit (column 6, rows 42-44 and column 8, rows 17-24) for the purpose of effectively preventing the adhesion of moisture.

23. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided the single wafer support of the first single-wafer load lock including a single

pedestal having an integral heating unit in order to prevent the adhesion of moisture as taught by Saito et al.

Conclusion

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karla Moore whose telephone number is 703.305.3142. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Mills can be reached on 703.308.1633. The fax phone numbers for the organization where this application or proceeding is assigned are 703.872.9310 for regular communications and 703.872.9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0661.

km
December 2, 2002

GREGORY MILLS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

Recent Statutory Changes to 35 U.S.C. § 102(e)

On November 2, 2002, President Bush signed the 21st Century Department of Justice Appropriations Authorization Act (H.R. 2215) (Pub. L. 107-273, 116 Stat. 1758 (2002)), which further amended 35 U.S.C. § 102(e), as revised by the American Inventors Protection Act of 1999 (AIPA) (Pub. L. 106-113, 113 Stat. 1501 (1999)). The revised provisions in 35 U.S.C. § 102(e) are completely retroactive and effective immediately for all applications being examined or patents being reexamined. Until all of the Office's automated systems are updated to reflect the revised statute, citation to the revised statute in Office actions is provided by this attachment. This attachment also substitutes for any citation of the text of 35 U.S.C. § 102(e), if made, in the attached Office action.

The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 in view of the AIPA and H.R. 2215 that forms the basis for the rejections under this section made in the attached Office action:

> **A person shall be entitled to a patent unless –**
>
> **(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.**

35 U.S.C. § 102(e), as revised by the AIPA and H.R. 2215, applies to all qualifying references, except when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. For such patents, the prior art date is determined under 35 U.S.C. § 102(e) as it existed prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. § 102(e)).

The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 prior to the amendment by the AIPA that forms the basis for the rejections under this section made in the attached Office action:

> **A person shall be entitled to a patent unless –**
>
> **(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.**

For more information on revised 35 U.S.C. § 102(e) visit the USPTO website at www.uspto.gov or call the Office of Patent Legal Administration at (703) 305-1622.